Appendix D



Lower Peverly Pond

Wilderness Review

- Introduction
- Phase I. Wilderness Inventory
- Summary of Wilderness Inventory Findings

Introduction

The purpose of a wilderness review is to identify and recommend to Congress lands and waters of the National Wildlife Refuge System (Refuge System) that merit inclusion in the National Wilderness Preservation System (NWPS). Only Federal lands are eligible to be considered for wilderness designation and inclusion within the NWPS. Wilderness reviews are required elements of comprehensive conservation plans (CCPs), are conducted in accordance with the refuge planning process outlined in the U.S. Fish and Wildlife Service Manual (602 FW 1 and 3), and include compliance with the National Environmental Policy Act (NEPA) of 1969 and public involvement.

The wilderness review process has three phases:

- 1. Inventory Phase
- 2. Study Phase
- 3. Recommendation Phase

Lands and waters that meet the minimum criteria for wilderness are identified in the inventory phase. These areas are called wilderness study areas. During the study phase, a range of management alternatives are evaluated to determine if a wilderness study area is suitable for wilderness designation or management under an alternate set of goals and objectives that do not involve wilderness designation. Finally, the recommendation phase consists of reporting recommendations to Congress in a wilderness study report. If warranted, the wilderness study report is prepared after the record of decision for the final CCP has been signed. If any areas are recommended for designation, they would be managed to maintain wilderness character, in accordance with management goals, objectives, and strategies outlined in the final CCP, until Congress makes a decision or the CCP is amended to modify or remove the wilderness proposal.

Phase I. Wilderness Inventory

Introduction

The wilderness inventory takes a broad look at each planning area (wilderness inventory area) to identify wilderness study areas. A wilderness study area is an area of undeveloped Federal land that retains its primeval character and influence, without permanent improvements or human habitation, and further, meets the minimum criteria for wilderness as identified in section 2(c) of the Wilderness Act of 1964 (16 U.S.C. § 1131-1136, 78 Stat. 890; Public Law 88-577).

Minimum Wilderness Criteria

A wilderness study area is required to

- \blacksquare appear natural;
- provide for *solitude or primitive recreation*; and
- be either a *roadless* area that meets the *size* criteria or an island of any size.

The following section provides a more detailed description of the four minimum wilderness criteria: naturalness, solitude or primitive and unconfined recreation, roadless, and size.

Naturalness

The Wilderness Act, section 2(c), defines wilderness as an area that "generally appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable." The area must appear natural to the average visitor, rather than "pristine." The presence of historic landscape conditions is not required.

An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. Significant hazards caused by humans, such as the presence of unexploded ordnance from military activity and the physical impacts of refuge management facilities and activities are also considered in evaluating the naturalness criteria.

An area may not be considered unnatural in appearance solely on the basis of the sights and sounds of human impacts and activities outside the boundary of the unit. The cumulative effects of these factors in conjunction with land base size, and physiographic and vegetative characteristics were considered in the evaluation of naturalness. The following factors were the primary considerations in evaluating naturalness:

- A. The area appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.
- B. The area may include some human impacts provided they are substantially unnoticeable in the unit as a whole.
- C. Does the area contain significant hazards caused by humans, such as the presence of unexploded ordnance from military activity?
- D. The presence of physical impacts of refuge management facilities and activities.

Solitude or Primitive and Unconfined Recreation

A wilderness study area must provide outstanding opportunities for solitude or primitive and unconfined recreation. The area does not have to possess outstanding opportunities for both solitude and primitive and unconfined recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk, self reliance, and adventure. Solitude and primitive unconfined recreation are not well defined by the Wilderness Act, but can be expected to occur together in most cases. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

The following factors were the primary considerations in evaluating outstanding opportunities for solitude or primitive unconfined recreation:

- A. The area offers the opportunity to avoid sights, sounds, and evidence of other people. A visitor to the area should be able to feel alone or isolated.
- B. The area offers non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport.

Roadless

Roadless refers to the absence of improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use. A route maintained solely by the passage of vehicles does not constitute a road.

The following factors were the primary considerations in evaluating the roadless criteria:

- A. The area does not contain improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- B. The area is an island, or contains an island, that does not have improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- C. The area is in Federal fee title ownership.

Size

The size criteria can be satisfied if an area has at least 5,000 acres of contiguous roadless public land, or is sufficiently large that its preservation and use in an unimpaired condition is practicable.

The following factors were the primary considerations in evaluating the size criteria:

- A. An area of more than 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- B. A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features.
- C. An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- D. An area of less than 5,000 contiguous acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the U.S. Department of Agriculture Forest Service, National Park Service, or Bureau of Land Management.

Supplemental Values

The Wilderness Act states that an area of wilderness may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. Supplemental values of the area are optional, but the degree to which their presence enhances the area's suitability for wilderness designation should be considered. The evaluation should be based on an assessment of the estimated abundance or importance of each of the features.

Great Bay National Wildlife Refuge

The CCP planning team identified the entirety of Great Bay National Wildlife Refuge (Great Bay Refuge, the refuge) (map D.1) as the only wilderness inventory area because there are no natural terrain barriers separating any portion of the refuge from any other portion. The CCP Planning Team evaluated the refuge to determine if it retains a primeval character and influence, is without permanent improvements or human habitation, and further, meets the minimum criteria for wilderness as identified in section 2(c) of the Wilderness Act. Our findings are described below.

Does the wilderness inventory area meet the following criteria:

(1) Have at least 5,000 acres of land, or is it of sufficient size to make practicable its preservation and use in an unconfined condition, or is it a roadless island?

No. The refuge is only 1,103 acres in size and is not a roadless island. It is also not of sufficient size to preserve and use in an "unconfined" or "unimpaired" condition due to its land use history as an Air Force Base. Remnants of the Pease Air Force Base are still visible on the refuge, including a former weapons storage area with concrete bunkers. Adjacent to the refuge is the remainder of the former Air Force Base which has been converted into the Pease International Tradeport. The tradeport is heavily developed and houses an international airport, office and industrial space, restaurants, and hotels.

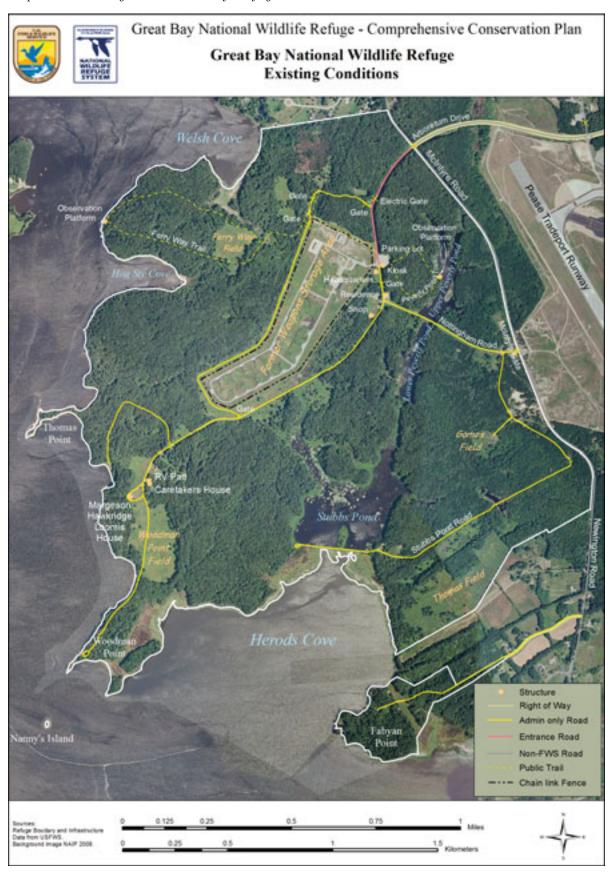
(2) Generally appear to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable?

No. The majority of the refuge would not look natural to the average visitor because of substantially noticeable human impacts.

The refuge has several administrative buildings, including refuge headquarters, refuge housing, and a maintenance building. Adjacent to refuge headquarters is a visitor parking lot, interpretive kiosk, and public restrooms. There are several service roads throughout the refuge. Two hiking trails begin at the visitor parking lot. The Ferry Way Trail begins as an asphalt path and then follows several old woods roads. The Peverly Pond Trail is paved with crushed stone and is Americans with Disabilities Act (ADA)-accessible. This trail leads to a wildlife blind and viewing platform. The refuge also has several man-made impoundments, including three on Peverly Brook and two other smaller impoundments along trails.

In addition to these facilities, the refuge also has two historic buildings listed on the National Registry of Historic Places: the Margeson-Hawkridge-Loomis Estate and caretaker's residence. As noted above, remnants

Map D.1. Great Bay National Wildlife Refuge



of the former Pease Air Force Base are visible in several locations on the refuge, including the former weapons storage area. This area is currently fenced in with by a chain-linked fence and concrete bunkers are visible. Again, the refuge is adjacent to an international airport that can be heard throughout the refuge.

(3a) Have outstanding opportunities for solitude?

No. There are few opportunities for visitors to be alone and feel secluded from other visitors in the area. Unnatural noise from the Pease International Tradeport detracts from solitude, as do the presence of refuge facilities and the former weapons storage area.

Large portions of the refuge are closed to the public, including the former weapons storage area. Most visitors are confined to two popular nature trails which limit opportunities to feel alone on the refuge. Although hunters have access to a greater portion of the refuge during a 2-day white-tailed deer hunt, the hunt is highly regulated and is only allowed in designated areas. Waterfowl hunting is also permitted along the refuge shoreline, but access is via boat only and not by foot through the refuge.

(3b) Have outstanding opportunities for a primitive and unconfined type of recreation?

No. The refuge does not have outstanding opportunities for primitive or unconfined recreational use. As mentioned above, major portions of the refuge are closed to most visitors limiting opportunities for unconfined and primitive recreation. Most recreation is limited to popular nature trails. Off-trail and off-road access is prohibited, except to white-tailed deer hunters during the 2-day hunt. Although these hunters have a somewhat greater opportunity for dispersed recreation, the hunt is highly regulated and only occurs in designated areas.

Also, noise from the Pease International Tradeport can be heard throughout the refuge. Although the Tradeport is outside of the wilderness study area, its noise has a major impact and would also likely diminish opportunities for a primitive experience.

(4) Contain ecological, geological, or other features of scientific, educational, scenic, or historical value?

Yes. The refuge contains a variety of features of ecological value. The refuge has a diversity of habitat types, from forested uplands, freshwater wetlands, and 6 miles of estuarine shoreline. The refuge also supports eight exemplary natural communities, as identified by the New Hampshire Natural Heritage Bureau, including eelgrass beds, oyster beds, and red maple-sensitive fern swamps. The refuge is home to a variety of animal species, while the larger Great Bay Estuary supports habitat for 23 species of federally and State-listed threatened and endangered plants and animals.

In addition, the refuge has an array of historical and cultural resources. At least 22 archaeological or historical sites are identified on the refuge. The refuge has two buildings on the National Registry of Historic Places: the Margeson-Hawkridge-Loomis Estate and its caretaker's residence. As part of the former Pease Air Force Base, the refuge also contains historical remnants of the base, including a former weapons storage area.

Summary of Wilderness Inventory Findings

The CCP Planning Team found that Great Bay Refuge does not meet any of the minimum criteria for wilderness as identified in section 2(c) of the Wilderness Act. While there are ecological and historic values on the refuge, these do not, in and of themselves, warrant wilderness recommendation. In summary, Great Bay Refuge does not qualify as a wilderness study area, and will not be considered further for wilderness designation in this CCP.